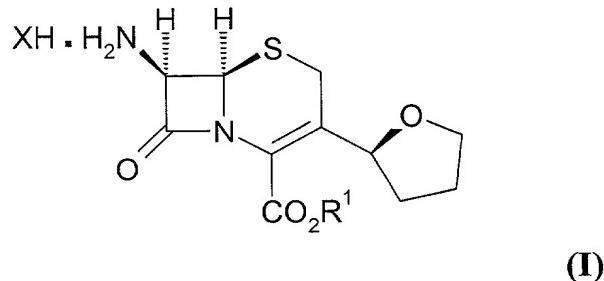


PROCESS AND ESTER DERIVATIVES USEFUL FOR PREPARATION OF  
CEPHALOSPORINS

ABSTRACT OF THE INVENTION

This invention relates a process for preparing a compound of formula (I)



5

wherein R<sup>1</sup> is *para*-nitrobenzyl or allyl; and X is halo, which is useful to prepare 3-cyclic-ether-substituted cephalosporins, from trimethylphosphinic compounds. This invention also relates to compounds useful in such process.